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2 PALO ALTO SQUARE

3000 EL CAMINO REAL

PALO ALTO, CA 94306

EXAMINER

LE, MIRANDA

ART UNIT

PAPER NUMBER

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Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Information Disclosure Statement

1. Applicants' Information Disclosure Statement, filed 07/21/2005, and 02/24/2004, have been received, entered into the record, and considered. See attached form PTO-1449.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-2, 4-8, 10, 12-15, 17-20, 22, 24 are rejected under 35 U.S.C. 101

because the claimed invention is directed to non-statutory subject matter.

Claim 1 fails to provide a practical application that produces a useful, concrete and tangible result. Claim 1 only appears to produce a tangible result under the conditions when a positive result is returned and when the threshold has been exceeded. Under all other conditions, i.e. the determining returns a negative result (e.g., when the cache is determined not to have stored therein query results corresponding to the search query); or when predefined conditions are not satisfied; or the reuse count is less than or equal to the predetermined threshold count..., no result is produced, only a determination which is neither applied in a practical application nor made available for use occurs.

The same issue appears present in claim 2, 12 and 13.

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Claims 4-8, 10, 14-15, 17-20, 22, 24, are dependent upon claims 2, 13, respectively, suffer from deficiencies similar to their respective base claim, and therefore are likewise rejected.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-2, 4-8, 10, 12-15, 17-20, 22, 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter applicant regards as the invention.

Claims 1-2, 12-13 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: the condition where

- the determining returns a negative result (e.g., when the cache is determined not to have stored therein query results corresponding to the search query).
- when predefined conditions are not satisfied.
- the reuse count is less than or equal to the predetermined threshold count.

Claims 4-8, 10, 14-15, 17-20, 22, 24, are dependent upon claims 2, 13, respectively, suffer from deficiencies similar to their respective base claim, and therefore are likewise rejected.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Getchius a et al. (US Patent No. 6,643,640), in view of Rosenzweig et al. (US Patent No. 6,526,479).

As to claims 1, 12, Getchius teaches a method for searching a document database, comprising:

receiving a search query (i.e. data query at col. 25, lines 32-33);

determining whether a query result corresponding to the search query is stored in a cache (i.e. At step 205, a determination is made to whether data results in the data query cache, col. 25, lines 60-61), (col. 25, line 60 to col. 26, line 19);

when the determining returns a positive result (i.e. If, at step 205, it is determined that there are one or more data sets in the data query cache, col. 26, lines 3-4), (col. 26, lines 3-19);

when predefined conditions are satisfied (i.e. extended parentage threshold, col. 26, lines 21-26), generating an improved search result in accordance with a first set of predetermined searching criteria (i.e. the determination of the start data set in step 208 may be the data set with is closest in terms of parentage and with the least number of listings in the data set, col. 26, lines 21-26), (col. 26, lines 3-58); and

returning at least a subset of the improved search result (i.e. Information Retrieval at col. 32, lines 17-32).

Getchius does not expressly teach these limitations “accessing a reuse count for the search query; and including the reuse count being larger than a predetermined threshold count”.

However, Rosenzweig teaches a reuse count (i.e. the number of visits at col. 7, lines 22 25); and a predetermined threshold count (i.e. a pre-determined number of times (col. 7, lines 26-33).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method for performing a data query, as disclosed by Getchius, to include accessing a reuse count for the search query; and including the reuse count being larger than a predetermined threshold count, as taught by Rosenzweig, because it would allow users to cache selected web resources as cached web resources in accordance with at least one of a number of times accessed, a frequency of access, or a duration of access. One of ordinary skill in the art would be motivated to make this combination in order to improve the performance of caching web resources obtained from the Internet.

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As to **claims 2, 13**, Getchius teaches a method for searching a document database, comprising:

receiving a search query (i.e. data query at col. 25, lines 32-33);

determining whether a query result corresponding to the search query is stored in a cache (i.e. At step 205, a determination is made to whether data results in the data query cache, col. 25, lines 60-61) (col. 25, line 60 to col. 26, line 19);

when the determining returns a positive result (i.e. If, at step 205, it is determined that there are one or more data sets in the data query cache, col. 26, lines 3-4), including determining a quality of the cached query result (i.e. cost, col. 26, line 14), (col. 26, lines 3-19);

when the quality indication meets predefined criteria (i.e. extended parentage threshold, col. 26, lines 21-26), generating an improved search result in accordance with a first set of predetermined searching criteria (i.e. the determination of the start data set in step 208 may be the data set with is closest in terms of parentage and with the least number of listings in the data set, col. 26, lines 21-26), (col. 26, lines 3-58); and

returning at least a subset of the improved search result (i.e. Information Retrieval at col. 32, lines 17-32).

Getchius does not expressly teach these limitations “accessing a reuse count for the search query, and when the reuse count is larger than a predetermined threshold count”.

However, Rosenzweig teaches a reuse count (i.e. the number of visits at col. 7, lines 22 25); and a predetermined threshold count (i.e. a pre-determined number of times (col. 7, lines 26-33).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method for performing a data query, as disclosed by Getchius, to include accessing a reuse count for the search query, and when the reuse count is larger than a predetermined threshold count, as taught by Rosenzweig because it would allow users to cache selected web resources as cached web resources in accordance with at least one of a number of times accessed, a frequency of access, or a duration of access. One of ordinary skill in the art would be motivated to make this combination in order to improve the performance of caching web resources obtained from the Internet.

As to claims 3, 15, Getchius teaches updating the cache with the improved search result (i.e. Least Recent Used, col. 27, lines 36-47);

Getchius does not explicitly teach this limitation “updating the reuse count of the search query”.

However, Rosenzweig teaches this claimed limitation at col. 7, lines 34-47 (i.e. count field associated with that web resource's URL in the table is incremented to reflect another access has been made).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method for performing a data query, as disclosed by Getchius, to include updating the reuse count of the search query, as taught by Rosenzweig because it would allow users to cache selected web resources as cached web resources in accordance with at least one of a number of times accessed, a frequency of access, or a duration of access. One of ordinary skill in the art would be motivated to

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make this combination in order to improve the performance of caching web resources obtained from the Internet.

As to claims 4, 16, Getchius teaches the quality indication does not meet the predefined criteria, retrieving the improved search result from the cache (i.e. extended parentage threshold, col. 26, lines 21-26), (col. 26, lines 3-58);

returning the improved search result (i.e. Information Retrieval at col. 32, lines 17-32).

Getchius does not expressly teach this limitation “if the reuse count is larger than the predetermined threshold count”.

However, Rosenzweig teaches a reuse count (i.e. the number of visits at col. 7, lines 22 25); and a predetermined threshold count (i.e. a pre-determined number of times (col. 7, lines 26-33).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method for performing a data query, as disclosed by Getchius, to include the condition where the reuse count is larger than the predetermined threshold count, as taught by Rosenzweig because it would allow users to cache selected web resources as cached web resources in accordance with at least one of a number of times accessed, a frequency of access, or a duration of access. One of ordinary skill in the art would be motivated to make this combination in order to improve the performance of caching web resources obtained from the Internet.

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As to claims 5, 17, Getchius teaches the first set of predetermined criteria comprises:

searching both a standard database and an additional database (i.e. Primary Database 812 and Secondary Database 814 at col. 14, lines 40-41) wherein the query result stored in the cache is generated using the standard database when the quality indication has the first value (col. 14, lines 37-63; col. 33, line 32 to col. 33, line 52).

As to claims 6, 18, Getchius teaches the first set of predetermined search criteria comprises:

searching a database with a larger search depth than a standard search depth, wherein the query result stored in the cache is generated using the standard search depth when the quality indication has the first value (i.e. one or more data sets in the data query cache that correspond to one or more parent terms at col. 26, lines 3-19).

As to claims 7, 19, Getchius teaches the first set of predetermined search criteria comprises:

searching a database using modified search criteria (i.e. extended parentage threshold are used, such as grandparents, col. 26, lines 21-26).

As to claims 8, 20, Getchius teaches generating an improved search result comprises:

submitting the search query to one or more document identification and document servers in accordance with the first set of predetermined search criteria (i.e. the document identifiers established for information retrieval software 908 may maintain pointer to

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other document or to sources of the documents, col. 34, lines 53-59) (col. 33, line 52 to col. 34, line 59);

receiving search results from the one or more document identification and document servers (i.e. a list of the ranked documents may be further processed by the information retrieval software to provide a result page, col. 34, lines 5-8), (col. 33, line 53 to col. 34, line 59); and

creating a search result list from the received search results (i.e. a list of the ranked documents may be further processed by the information retrieval software to provide a result page, col. 34, lines 5-8), (col. 33, line 53 to col. 34, line 59).

As to claims 9, 21, Getchius teaches when the cache is determined not to have stored therein query results corresponding to the search query:

generating a standard search result in accordance with a second set of predetermined searching criteria (i.e. use alternate technique, step 212 in Fig. 3; col. 25, line 60 to col. 26, line 2); and

storing the standard search result in the cache (i.e. Least Recent Used at col. 27, lines 36-47)

returning the standard search result (i.e. Information Retrieval at col. 32, lines 17-32).

Getchius does not specifically teach this limitation “setting the reuse count of the search query to an initial value”.

However, Rosenzweig teaches “setting the reuse count of the search query to an initial value” (i.e. the table and cache are erased and re-initialized at col. 8, lines 1-5).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method for performing a data query, as disclosed by Getchius, to include setting the reuse count of the search query to an initial value, as taught by Rosenzweig because it would allow users to cache selected web resources as cached web resources in accordance with at least one of a number of times accessed, a frequency of access, or a duration of access. One of ordinary skill in the art would be motivated to make this combination in order to improve the performance of caching web resources obtained from the Internet.

As to claims 10, 22, Getchius teaches generating a standard search result comprises:

submitting the search query to one or more document identification and document servers in accordance with the second set of predetermined searching criteria (i.e. the document identifiers established for information retrieval software 908 may maintain pointer to other document or to sources of the documents, col. 34, lines 53-59) (col. 33, line 52 to col. 34, line 59);

receiving search results from the one or more document identification and document servers (i.e. a list of the ranked documents may be further processed by the information retrieval software to provide a result page, col. 34, lines 5-8) (col. 33, line 53 to col. 34, line 59); and

creating a search result list from the received search results (i.e. a list of the ranked documents may be further processed by the information retrieval software to provide a result page, col. 34 lines 5-8), (col. 33 line 53 to col. 34 line 59).

As to claims 11, 23, Getchius teaches retrieving a standard search result from the cache (col. 28, lines 3-65; col. 30, lines 7-45); and

returning the standard search result (i.e. Information Retrieval at col. 32, lines 17-32).

Getchius does not expressly teach this limitation “if the result count is less than or equal to the predetermined threshold count”.

However, Rosenzweig teaches a reuse count (i.e. the number of visits at col. 7, lines 22-25); and a predetermined threshold count (i.e. a pre-determined number of times (col. 7, lines 26-33).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method for performing a data query, as disclosed by Getchius, to include the condition where the result count is less than or equal to the predetermined threshold count, as taught by Rosenzweig because it would allow users to cache selected web resources as cached web resources in accordance with at least one of a number of times accessed, a frequency of access, or a duration of access. One of ordinary skill in the art would be motivated to make this combination in order to improve the performance of caching web resources obtained from the Internet.

As per claim 14, Getchius teaches the search results in the cache comprise:
identifications of documents (col. 34, lines 53-59);
contents of portions of documents corresponding to at least a subset of the
identifications of documents (col. 36, lines 24-67); and

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parameters of documents corresponding to the identifications of documents (col. 35, line 14 to col. 36, line 67).

As per claim 24, Getchius teaches one or more interface modules for receiving a search query (col. 4, line 44 to col. 5, line 62);

one or more storage modules for storing document identifications and the corresponding documents to be searched (col. 4, line 44 to col. 5, line 62);

wherein the search controller is configured to generate the improved search result by searching at least a subset of the stored document identifications (col. 5, line 63 to col. 6, line 59).

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Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Miranda Le whose telephone number is (571) 272-4112. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham, can be reached on (571) 272-7079. The fax number to this Art Unit is (571)-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Miranda Le
June 05, 2006



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PRIMARY EXAMINER